

REMARKS

The foregoing amendments are submitted in response to the first Office action in an effort to place the application in condition for allowance as hereinafter pointed out. Also submitted herewith are formal drawings as replacements drawing sheets for the informal drawings as filed, in compliance with 37 CFR 1.121(d).

Claims 1-4 were all rejected under 35 U.S.C. 103(a) over the disclosure in the English patent of record as the primary prior art reference, in view of the disclosures in four secondary prior art references. Six different interrelated features of the present invention, as set forth in claims 1-4, were referred to in the Office action as not being disclosed in the English patent. Accordingly, the four secondary prior art references were relied on for making obviousness judgments under 35 U.S.C. 103(a) with respect to each of the six different claimed features of the present invention not disclosed in the English patent. Such claimed features of the present invention, which distinguish over the disclosure in the English patent as conceded in the Office action, are as follows:

- (1) "magnetic means", as set forth in claim 1, in contrast to the pneumatic type of actuator (3) as disclosed in the English patent;
- (2) "load sensing means--for--recording measurement data", as set forth in claim 1;
- (3) "magnetic coil through which the actuator rod extends", as set forth in claim 2;
- (4) "electric power supply battery; and switch means interconnecting the battery with the magnetic coil", as set forth in claim 2;
- (5) "anchored strain arm displaced into engagement with the test surface by the actuator rod", as set forth in claim 3; and
- (6) "load cell means mounted on the strain arm and connected to the load sensing means for transmission of sensing signals thereto", as set forth in claim 3.

The Brandon patent is one of the four secondary prior art references relied on in regard to the (1) magnetic means, even though it explicitly discloses only a pneumatic type of probe actuator (19). Column 5, lines 7-10 of the Brandon patent states that "--the probe actuator can be operated by--electrical--means" as pointed out by the Office action. However such statement in the Brandon patent is not an explicit disclosure of an electromagnetic coil type of probe actuator having a coil through which the probe actuator rod extends, as conjectured in the Office action. Accordingly all of the rejections of claims 1-4 resort to hindsight derived from the disclosure in the present application, in contrast to the actual disclosure in the Brandon patent. All of the rejections are therefore improper under 35 U.S.C. 103(a) on this one account.

The Yuan patent was also relied on in regard to the claimed (2) load sensing means, even though it was conceded that the pressure gauge 20 as disclosed in the Yuan patent and referred to as the load sensing means does not record measurement data. Such concession was however improperly ignored in favor of hindsight speculation that the friction testing apparatus as disclosed in the Yuan patent suggests use of computer control to automatically and interactively execute desired evaluation procedures so as to avoid data errors. Accordingly the rejections of claims 1-4 are therefore also improper on a second account.

The Welner patent was relied on to support the Examiner's contention as to obviousness in regard to use of a battery and switch for independent operational powering of the electromagnetic probe actuator associated with the present invention, as set forth in dependent claims 2 and 3. However according to the disclosure in the Welner patent, slip resistance measurement involves use of a RAM 54 that is powered by battery 59 without use of the power switch 57, as stated for example in column 8, lines 2-4 of the Welner patent. Accordingly, the rejections of claims 2 and 3 are also improper on a third account.

Finally the Owen et al. patent was relied on in regard to two of the claimed features not disclosed in the English patent involving: (5) anchored strain arm distinction and the (6) load cell means. The referred to portions of the disclosure in the Owens et al. patent involve use of a coupling rod 55 as the strain arm connecting an active mechanism 63, as the actuator rod, to a column assembly 50 with a strain gauge 57 attached thereto for readout of data therefrom, rather than transmission thereto of load sensing signals pursuant to the present invention as called for in claim 3. The rejections of claim 3 are therefore also improper on a fourth account.

Based on the foregoing referred to aspects of the disclosure in the English patent as the primary prior art reference and the disclosures in the Brandon, Yuan, Welner and Owens et al. patents as the secondary prior art references utilized to establish backgrounds for determination of obviousness under 35 U.S.C. 103(a), the rejections are improper on the four latter referred to accounts. Such rejections under 35 U.S.C. 103(a) are therefore in error under current case law as explained in Sections 2141, 2141(a), 2141.02, 2143.01 and 2143.03 M.P.E.P. which refer to the case of Graham V. John Deere Co., 148 USPQ 459. An allowance of the present application based on claims 1-4 is therefore in order and hereby requested.

Respectfully submitted,



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